

AMENDMENTS TO THE ABSTRACT:

Please amend the Abstract as follows:

A sparse array antenna is disclosed. The antenna comprises series-fed antenna array columns tuned to a respective transmit and receive frequency. The transmitting and receiving radiation elements are formed with a given distance between each transmitting radiator element and each receiving radiator element, and the series-fed antenna columns are arranged in parallel, perpendicular to a symmetry line forming a symmetric interleaved transmit/receive array. Furthermore the receiving array columns operate as parasitic elements in a transmit mode and transmitting array columns operate as parasitic elements in a receive mode, thereby reducing creation of grating lobes. The created sparse array antenna may further be arranged to be ~~seamable~~ scannable to also provide reduced sidelobes entering visual space when scanning the main radiation lobe from an off boresight direction. Typically the series-fed array columns may be formed as extended ridged slotted wave-guides tuned to a respective transmitting or receiving frequency.